Appendix 1: Sediment Sample Data

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Thirteen sediment samples were collected within the study area between June 11 and June 12, 2002. All samples were collected using a Shipek sampler deployed from the survey launch using a winch and davit setup. Sampling locations are shown in Figures A1-1 to A1-3. Samples were collected as part of the ground-truthing effort in support of the acoustic mapping.

Samples were photographed, described and then sub-sampled for particle size analyses. Prior to particle-size analysis were freeze-dried and sorted to remove large debris. All processing and analyses of the samples was done at the National Water Research Institute of Environment Canada following methods described by Duncan and LaHaie (1979).

Table A1-1 list the site locations, sampling depths and particle size distribution. The sand fraction was further divided into 3 sub-classes of course, medium and fine sand by sub-dividing phi-size range of sand into 3 equal intervals. Only two samples from Site 1 and Site 5 in Pequaming Bay had sufficient proportions of the silt and clay fraction to permit further separation of this size-range.

Table A1-1: Particle Size Distribution.

Site	Northing	Easting	Depth	Gravel	Sand	Course Sand	Medium Sand	Fine Sand	Silt\Clay	Silt	Clay
1	5189008	393631	13.5	0.3	54.7	1.4	3.8	49.6	45.1	31.6	13.5
2	5189361	393992	3.8	0.6	98.1	4.3	4.7	89.1	1.2	0.0	0.0
3	5188951	394221	13.0	1.6	82.6	2.9	8.1	71.6	15.8	0.0	0.0
4	5188200	394294	5.2	0.6	98.9	16.6	59.8	22.6	0.5	0.0	0.0
5	5187658	393551	15.4	0.0	64.6	3.3	14.3	47.1	35.4	27.9	7.5
6	5187523	393566	14.8	0.0	95.9	8.0	45.3	42.6	4.1	0.0	0.0
7	5179894	388309	14.8	54.2	45.0	18.5	16.9	9.6	0.8	0.0	0.0
8	5187881	387566	5.5	0.0	99.5	1.4	4.6	93.4	0.5	0.0	0.0
9	5187702	387190	3.6	1.1	98.4	2.2	17.5	78.8	0.5	0.0	0.0
10	5186845	387619	6.3	0.0	98.4	1.1	4.2	93.2	1.6	0.0	0.0
11	5186899	388105	14.7	0.0	96.0	0.1	0.6	95.2	4.0	0.0	0.0
12	5182678	388432	5.5	15.2	84.5	15.5	31.3	37.7	0.4	0.0	0.0
13	5182637	388460	13.1	0.0	99.4	0.5	15.1	83.8	0.5	0.0	0.0

Sites 7 and 12 were the only sites with appreciable amounts of gravel in the samples. Site 7 with 54.2% gravel was collected just offshore of the mouth of Falls River; this site also had the highest percentage of course sand. The sample from Site 12 also had gravel and larger proportion of course sand. This sample was collected immediately north of the Sand Point Light a location previously noted to be the only area in the study that had noticeable currents.

Figures A1-4 shows the samples as collected and the measured particle size distribution.

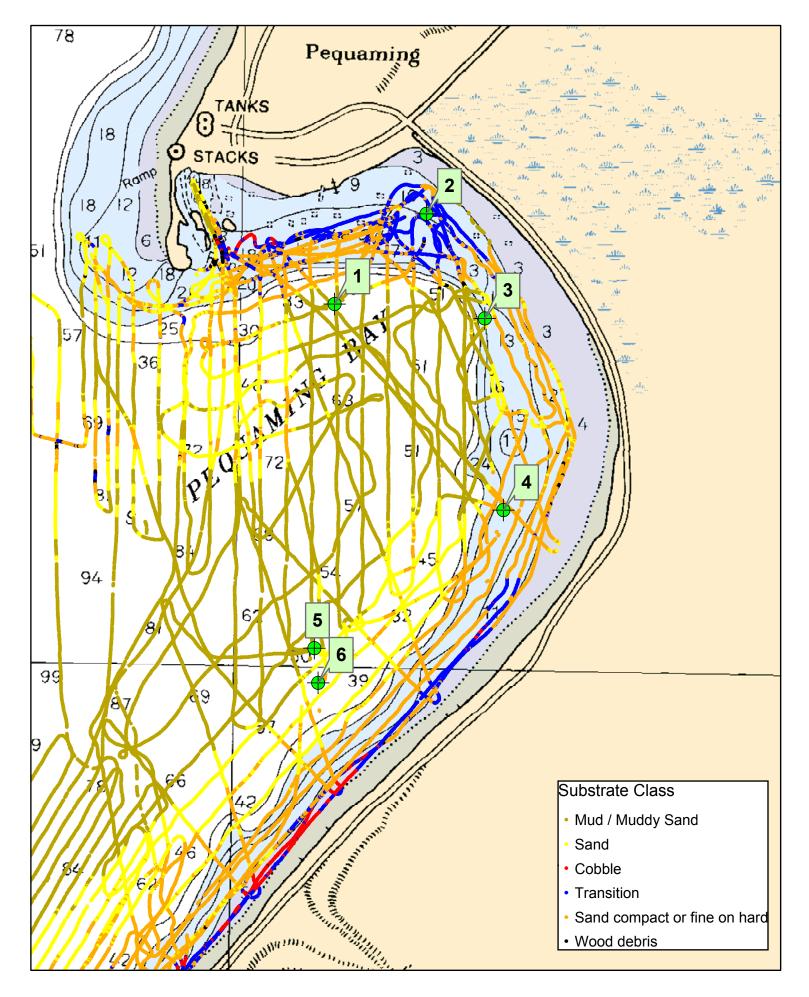


Figure A1- 1: Sediment sample locations - Pequaming Bay

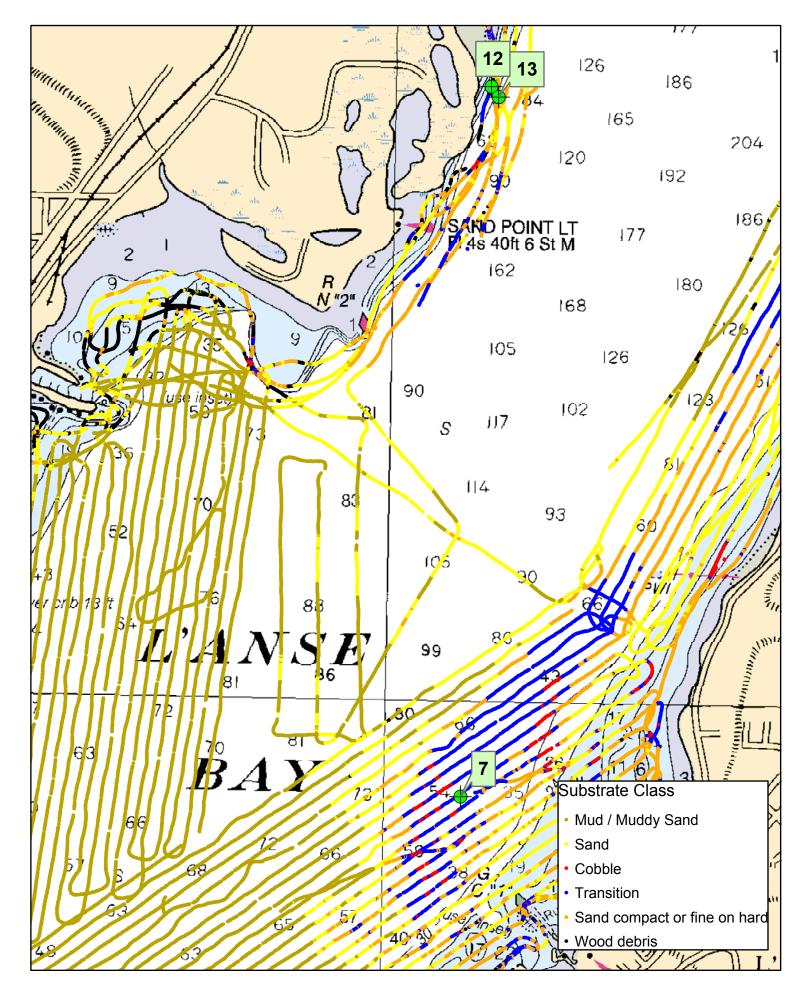


Figure A1- 2: Sediment sample locations - L' Anse Bay and West Shore

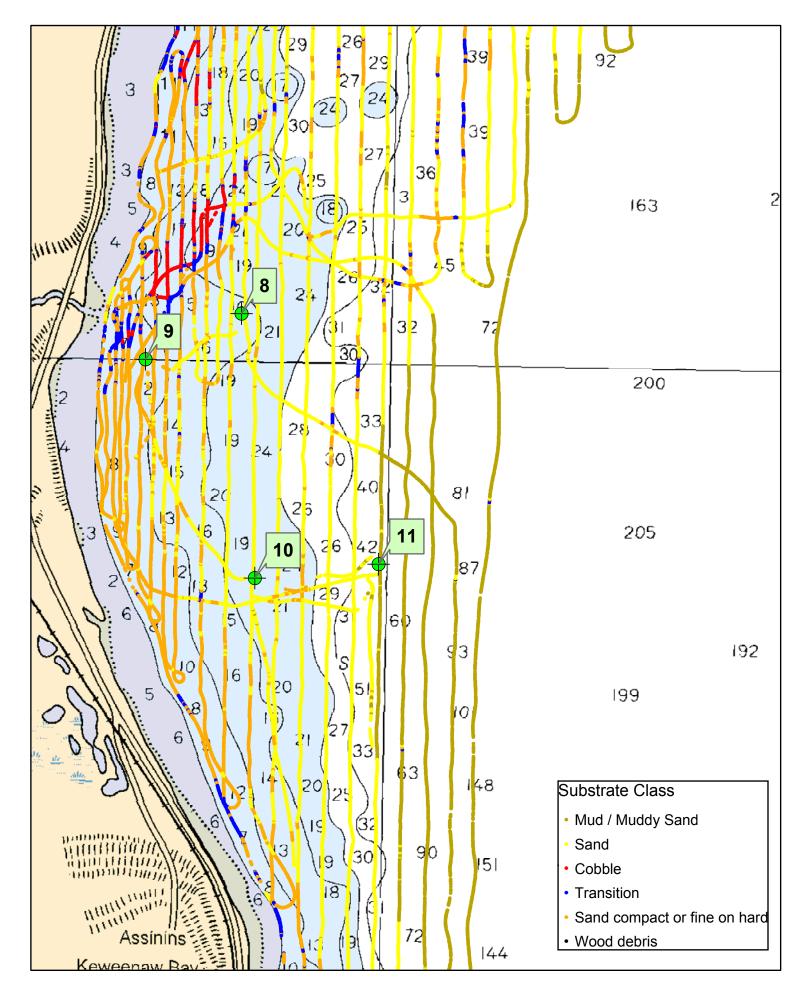
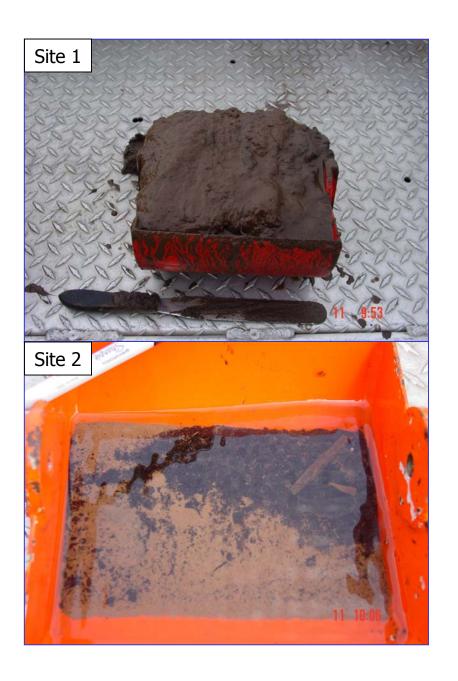
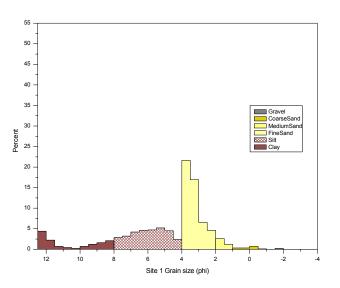
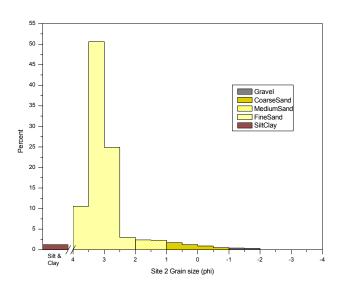


Figure A1- 3: Sediment sample locations - West Shore

Figure A1-4: Sediment sample photographs and particle-size distribution







Site 3

No image available

